

METHOD AND SYSTEM FOR ACCESSING
OBJECTS OF DIFFERENT THREAD TYPES

ABSTRACT OF THE DISCLOSURE

A method in a computer system for accessing Microsoft Component Object Model (“COM”) objects of varying thread types from a Java-based program. The computer system has a Java virtual machine (“VM”) that executes statements of the Java program and that executes in a multithreaded process. When executing a statement of the Java-based program to instantiate a COM object, the system creates a wrapper object. When the COM object is not thread-safe, the system requests an appropriate thread to instantiate the COM object and stores an identifier of the thread in the wrapper object. When the COM object is thread-safe, the system instantiates the COM object from the current thread and stores an indication in the wrapper object that the COM object can be accessed from any thread. When executing a statement of the Java-based program to invoke a method of the COM object, the system requests the thread identified in the wrapper object to invoke the method of the COM object. When the wrapper object indicates that the COM object can be referenced from any thread, the system invokes the method of the COM object referenced by the wrapper object directly from the current thread.